## Final Scientific/Technical Report

**DOE Award Number** DE-FG36-07GO17086

**Name of Recipient** Warm Springs Power and Water Enterprise a Corporate Entity of the Confederated Tribes of Warm Springs Oregon.

<u>Project Title</u> Human Capacity Building Grant for Renewable energy development.

## Name of Project/Principal investigator, and consortium/teaming members.

Warm Springs Power and Water Enterprise staff, Confederated Tribes of Warm Springs Natural Resources Department, Warm Springs forest Products Industries, Oregon Department of Energy, Geothermal Education Office, Oregon Institute of Technology GeoHeat Center, Oregon State University, Energy Resource Research Laboratory (ERRL), Northwest SEED, and DW McClain & Associates.

## **Executive Summary**

Warm Springs Power and Water Enterprises developed and distributed written materials, held workshops and field trips to educate tribal members on renewable energy projects that are a possibility utilizing resources on reservation.

### Comparison of actual accomplishments and goals

Our goals with this grant were to build educational materials, educational workshops and training seminars, as well as plan fieldtrips to various renewable energy work sites. Task one:

Organizational meeting was completed February 2008. Task two: Construct renewable energy material to educate Tribal members. This was done with the help of NW SEED, who helped WS Power and Water Enterprises construct a booklet describing what renewable energy is and all the possibilities for renewable energy on the reservation. Task two was completed October 2008. Task three: Wind Energy fieldtrip. February 2009 WS Power and Water provided a fieldtrip for Tribal Council, Tribal Committee, and Tribal members. The trip was to Wasco, Oregon to take a firsthand look at Portland General Electric's Biglow Wind farm. Task four: Provide community workshops on renewable energy. Task four was completed when WS Power and Water Enterprises held a community workshop on renewable energy in Kah-nee-tah, Oregon on October 2008, and distributed its renewable energy booklet.

Task five: WSWPE Training. Training was provided to Wil Sando the Renewable Energy Technician for WSWPE in the month of May, when Wil was sent to the annual AWEA Wind Power Conference in Chicago Illinois. Task six: WSPWE Tribal Energy Summit. Task six was completed in May

2009 when WSPWE held an energy summit in Kah-nee-ta, Oregon. The energy summit informed Tribal council, Tribal committee and natural resource members on the status of possible renewable energy projects on the reservation. Task seven: Geothermal area field trip for committee members. Task seven was completed in June 2009 when WSPWE went on a field trip to Reno NV. WSPWE board members, Tribal council, and employee's toured ORMAT's Steamboat Springs Geothermal Plant, and learned a great deal from the operators of the plant.

Task eight: In the month of May 2009 WSPWE purchased a 60m met tower, and the project was completed in September 2009 when Vertical Technologies constructed 60m met tower in the Mutton Mt's. As well as completing task nine by replacing wind instruments on two 50m met tower. Tribal members were present in the field while the 60m met tower was being assembled, due to its need for expertise in the assembly. Tribal members observed and lent a hand where ever possible.

#### **Summarize Project Activities**

WSPWE worked very diligently to complete all tasks that were planned out. These tasks were accomplished by organizing meetings, workshops, training sessions, field trips, and creating informational material. There were no major problems that accrued in completing this project. A major impact to the Warm Springs Reservation was enlightenment about renewable energy, and the abilities the reservation has to harness renewable energy locally.

# **Products Developed under award**

WSPWE worked with NW SEED to create a Tribal renewable energy booklet, this will be mailed to the DOE Project Officer.







